

Breast Milk Intake Studies

- 1) Ryan, AS. (1997) The resurgence of breastfeeding in the United States. (1997) *Pediatrics* 99(4):E12.

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The Ross Products Division of Abbott Laboratories conducted a large, national mail survey to determine patterns of breastfeeding during the first 6 months of life. The Ross Laboratory Mothers's Survey was first developed in 1955 and has been expanded to include many more infants. Before 1991, the survey was conducted on a quarterly basis, and approximately 40,000 to 50,000 questionnaires were mailed each quarter. Beginning in 1991, the survey was conducted monthly; 35,000 were mailed each month. Over time, the response rate has been consistently in the range of $50\% \pm 5$. For this update, 196,000 and 720,000 questionnaires were mailed in 1989 and 1995, respectively. The author reports rates of breastfeeding through 1995 and compares these rates with those in 1989.

The survey demonstrates recent increases in both the initiation of breastfeeding and continued breastfeeding at 6 months of age (Table 1). From 1989 to 1995, there was a 14% increase in the initiation of breastfeeding and a 19% increase in the rate of breastfeeding at 6 months of age. The only decreases observed were in breastfeeding at 6 months of age among mothers older than 30 (<1%).

The largest increases in the initiation of breastfeeding between 1989 and 1995 occurred among women who were black, < 20 years of age, in the < \$10,000 income level, no more than grade school educated, and living in the South Atlantic region of the U.S.; women who had infants of low birth weight; women who were employed full time outside the home at the time they received the survey; and women who participated in the Women, Infants, and Children program (WIC). Similar trends were observed for increases in breastfeeding at 6 months of age.

For both years, the incidence of breastfeeding in the hospital and at 6 months of age was highest among women who were white, >35 years of age, in the >\$25,000 income group, and college educated; women who did not participate in the WIC program; and women who were living in the Mountain and Pacific regions of the U.S.

Table 1. Breastfeeding in the Hospital and at 6 Months of Age by Selected Demographic Characteristics, 1989 through 1995

Characteristic	In Hospital			At 6 Months		
	1989 (%)	1995 (%)	Change (%) ^a	1989 (%)	1995 (%)	Change (%) ^a
All Infants	52.2	59.7	14.4	18.1	21.6	19.3
White	58.5	64.3	9.9	21.0	24.1	14.8
Black	23.0	37.0	60.9	6.4	11.2	75.0
Hispanic	48.4	61.0	26.0	13.9	19.6	41.0
Maternal Age (years)						
<20	30.2	42.8	41.7	5.6	9.1	62.5
20-24	4.2	52.6	16.4	11.5	14.6	27.0
25-29	58.8	63.1	7.3	21.1	22.9	8.5
30-34	65.5	68.1	4.0	29.3	29.0	(1.0) ^b
35+	66.5	70.0	5.3	34.0	33.8	(0.6) ^b
Total Family Income						
<\$10,000	31.8	41.8	31.4	8.2	11.4	39.0
\$10,000 - \$14,999	47.1	51.7	9.8	13.9	15.4	10.8
\$15,000 - \$24,999	54.7	58.8	7.5	18.9	19.8	4.8
≥25,000	66.3	70.7	6.6	25.5	28.5	11.8
Maternal Education						
Grade School	31.7	43.8	38.2	11.5	17.1	48.7
High School	42.5	49.7	16.9	12.4	15.0	21.0
College	70.7	74.4	5.2	28.8	31.2	8.3
Maternal Employment						
Employed Full Time	50.8	60.7	19.5	8.9	14.3	60.7
Employed Part Time	59.4	63.5	6.9	21.1	23.4	10.9
Not Employed	51.0	58.0	13.7	21.6	25.0	15.7
Birth Weight						
Low (<2,500 g)	36.2	47.7	31.8	9.8	12.6	28.6
Normal	53.5	60.5	13.1	18.8	22.3	18.6
Parity						
Primiparous	52.6	61.6	17.1	15.1	19.5	29.1
Multiparous	51.7	57.8	11.8	21.1	23.6	11.8
WIC Participation ^c						
Participant	34.2	46.6	36.3	8.4	12.7	51.2
Nonparticipant	62.9	71.0	12.9	23.8	29.2	22.7

Characteristic	In Hospital			At 6 Months		
	1989 (%)	1995 (%)	Change (%) ^a	1989 (%)	1995 (%)	Change (%) ^a
U.S. Census Region						
New England	52.2	61.2	17.2	18.6	22.2	19.4
Middle Atlantic	47.4	53.8	13.5	16.8	19.6	16.7
East North Central	47.6	54.6	14.7	16.7	18.9	13.2
West North Central	55.9	61.9	10.7	18.4	21.4	16.3
South Atlantic	43.8	54.8	25.1	13.7	18.6	35.8
East South Central	37.9	44.1	16.4	11.5	13.0	13.0
West South Central	46.0	54.4	18.3	13.6	17.0	25.0
Mountain	70.2	75.1	7.0	28.3	30.3	7.1
Pacific	70.3	75.1	6.8	26.6	30.9	16.2

a The percent change was calculated using the following formula: % breastfed in 1984 - % breastfed in 1989 / % breastfed in 1984.

b Figures in parentheses indicate a decrease in the rate of breastfeeding from 1989 to 1995.

c WIC indicates Women, Infants, and Children supplemental food program.

Source: Ryan, 1997